

**State P-16 Council's
Committee on Mathematics Curricula Alignment
March 23, 2006, 9:30-11:30 am
Tennessee Higher Education Commission**

Charge: Recommend mathematics high school-to-college curricula alignment goals and the process for attaining them to the State P-16 Council.

Framework: At their January 2006 joint meeting, the State Board of Education and the Tennessee Higher Education Commission endorsed the Committee's exploration of the following:

- High school-to-college mathematics curricula alignment
- 4 units in mathematics required for high school graduation
- 4 units in mathematics required for university admission
- Mathematics in the high school senior year
- Early assessment in 8th and 10th grades

Agenda

1. Welcome and introductions
2. Reasons for Committee assignment and Context for Committee work (Gary Nixon, John Scott, Deborah Boyd, Katie High, Linda Doran)
3. Tennessee student performance data (Brian Noland)
 - Preliminary overview of ACT High School Feedback Report
 - Update on ACT EPAS System
4. Conversation with Dr. Jim Applegate, Vice President for Academic Affairs, Kentucky Post-secondary Council, on Kentucky's process for policy changes in mathematics requirements (Linda Doran)
5. Conversation with Dr. Jim White, ACT, on ACT Student Readiness Standards, ACT Benchmarks, and Tennessee data needs (Katie High)
6. Processes for K-12 curriculum revision (Scott Eddins)
7. Next Steps/Next Meeting "homework"
 - Summary of institutional and local initiatives for improving mathematics readiness for college
 - "What should a student know and be able to do to succeed in entry-level college mathematics?"

Context for Committee Work

Current Activity in Support of Mathematics Standards Reform

March 23, 2006

State P-16 Council. The Tennessee P-16 Council is a nine-member committee: Commissioner of Education, Executive Director of the State Board of Education, Executive Director of Tennessee Higher Education Commission, Chancellor of the Tennessee Board of Regents, President of the University of Tennessee System, President Tennessee Independent Colleges and Universities Association, Governor's staff, Tennessee Chamber of Commerce, Tennessee Business Roundtable. The Tennessee Council is the oversight body for statewide P-16 initiatives, including college readiness initiatives such as mathematics high school to college curriculum alignment.

Local P-16 Councils. Through the leadership of the TBR, thirteen self-supporting local councils have been established. These cooperatives of K-12, higher education, community, and business aim to improve student high school and college completion through various intervention and support strategies. Improving student performance in mathematics is the focus for one or more of the local councils.

Annual Joint Meeting of the State Board of Education and the Tennessee Higher Education Commission. At their January 2006 joint meeting, the SBE and THEC endorsed pursuit of secondary and post-secondary policy changes to support increased student mathematics readiness for college or career.

Tennessee GEAR-UP Grant. The State has received a 6-year, 20 million dollar federal grant designed to improve student middle and high school achievement, retention, and participation in post-secondary education, especially in areas of the state where baccalaureate attainment levels are lowest. Features of the GEAR UP program, including early assessment in 8th and 10th grades, are directly supportive of increased rigor in mathematics and high school-to-college curricula alignment.

Dual Enrollment Grant. The grant pays for academically eligible high school juniors and seniors to earn college credit which also satisfies high school graduation requirements. Dual enrollment can accelerate a student's completion of a college degree. Enrollments in college mathematics courses represent a significant percentage of dual enrollment activity.

Governor's Emphasis on Math and Science. Governor Bredesen has expressed interest in pursuing the establishment of a State residential high school which will focus on mathematics and science.

High School Redesign. This initiative is a joint effort between the State Board of Education and the State Department of Education aimed at addressing high school issues including improving student mathematics proficiency and readiness for college and reclaiming the senior year. The Focus Group calls on input from middle school and high school principals, district officers, superintendents, curricula framework specialists, and other school leaders. THEC staff has been invited and have attended meetings.

National organizations promoting student readiness for college reform. The following documents are attached to the transmitting email as pdf files. Among these movements are those sponsored by:

- Southern Regional Education Board. *Student Readiness for College: Connecting State Policies*
www.sreb.org/main/HigherEd/readiness/Student_Readiness
- US Department of Education. *The Toolbox Revisited 2006: Paths to Degree Completion from High School through College*
www.ed.gov/rschstat/research/pubs/toolboxrevisit/toolbox.pdf
- Education Trust/Achieve. *Closing the Expectations Gap-2006*
www.achieve.org
- Pathways to College Network. *A Shared Agenda* www.pathwaystocollege.net
- National Governors Association. *Improving America's High Schools*
- ACT Student Readiness Standards www.act.org/standard/
- ACT College Readiness Benchmarks
www.act.org/path/policy/pdf/benchmarks.pdf
- SHEEO: K-16 Projects www.sheeo.org

Policy decisions in other states. A number of states have recently revised high school graduation requirements to specify four units of mathematics through at least Algebra II. Among these states are North Carolina (UNC System), Kentucky, Oklahoma, Indiana, Arkansas, and Texas.

Institutional and Cooperative Initiatives. A number of institutional and local efforts to improve student mathematics readiness for colleges are underway around the state. Committee members will be asked to provide summaries of their involvement with these initiatives as a means to encourage collaboration, replication, and promotion of successful programs.

Curricula Alignment Discussions to-date: The core group constituting the Committee before membership was broadened recognized the following probably factors in Committee decisions:

- College preparatory as primary (default) high school curriculum with “opt out” provisions
- Dual Enrollment opportunity to evaluate high school/college mathematics course outcomes fit
- Mathematics teacher education program expectations
- Mathematics teacher “pipeline” and personnel sufficiency issues
- Mathematics teacher professional development
- State-wide high school exit tests for college-course placement
- ACT Student Readiness Benchmarks
- ACT Student Readiness Standards
- College Board AP courses
- GEAR UP sites as “laboratory” for mathematics standards revision and student support interventions